SASKATCHEWAN HEALTH RESEARCH BOARD

ANNUAL REPORT

Period ending March 31, 1988

—Saskatchewan Health Research Board—

#5 — 3002 Louise Street
Saskatoon, Saskatchewan
S7J 3L8 (306) 373-5575

March 1989

The Hon. George McLeod
Minister of Health
Legislative Building
Regina, Saskatchewan
S4S 0B3

Sir:

I beg to present herewith for your consideration the Annual Report of the Saskatchewan Health Research Board for the fiscal year ending March 31, 1988.

Respectfully submitted

Dr. Bev Robertson
Chairman

TABLE OF CONTENTS

PAGE

LETTER OF TRANSMITTAL

1. CHAIRMAN'S STATEMENT 1
2. LEGISLATIVE AUTHORITY AND MANDATE 3
3. THE SASKATCHEWAN HEALTH RESEARCH FUND 3
4. COMPETITIONS AND AWARD CATEGORIES 3
5. COMPETITION AND REVIEW PROCESS 5
6. PROFILE OF THE EIGHTH GENERAL COMPETITION (1987-88) . . . 5
7. STRATEGIC AND MATCHING GRANTS COMPETITION 7
8. CONNECTIONS '88 GERONTOLOGY RESEARCH SYMPOSIUM 8
9. CONSIDERATIONS FOR THE FUTURE 8

TABLES

1 SUMMARY OF ELIGIBLE APPLICATIONS RECEIVED, RECOMMENDED, AND FUNDED, COMPETITION 8 (1987-88) 6

FIGURES

1 GENERAL FUND NET ANNUAL EXPENDITURES 4

APPENDICES

1 SASKATCHEWAN HEALTH RESEARCH BOARD (APRIL 1, 1987 THROUGH MARCH 31, 1988 10

2 FINANCIAL STATEMENTS AND THE AUDITOR'S REPORT THEREON . . . 12

3A SASKATCHEWAN HEALTH RESEARCH BOARD BIOMEDICAL REVIEW COMMITTEE, COMPETITION 8 (1987) 21

3B SASKATCHEWAN HEALTH RESEARCH BOARD SOCIO-HEALTH REVIEW COMMITTEE, COMPETITION 8 (1987) 22

3C SASKATCHEWAN HEALTH RESEARCH BOARD PERSONNEL AWARDS REVIEW COMMITTEE, COMPETITION 8 (1987) 23

4 SASKATCHEWAN HEALTH RESEARCH BOARD AWARDS GRANTED, COMPETITION 8, (1987). 24

1. CHAIRMAN'S STATEMENT

A YEAR OF ACCOMPLISHMENT

The Saskatchewan Health Research Board (SHRB) concluded its ninth year of operation in 1987-88. The Board can look back on an extremely eventful and productive year.

Two main initiatives highlight the year's activities. The CONNECTIONS '88 symposium on research and policy on aging and health drew together an international cast of researchers, public servants, health care practitioners, program managers, and consumers. The event has been described by numerous registrants as the finest event of its kind that they have ever attended. The Board counts as a most significant achievement the fact that the conference addressed the needs of both the research and public policy communities. In addition, a wide range of organizations and individuals contributed significantly to the 16 months of planning and organization for CONNECTIONS '88, which in itself created what we hope will be a renewed sense of community in gerontology.

The second main achievement of 1987-88 was the culmination of our initial Strategic and Matching Grants Competition. The Board is keenly aware of the contemporary trend towards multidisciplinary health research and the development of centres of excellence. While Saskatchewan's size, location, and limited research infrastructure are obstacles to be overcome in attracting the large national grants essential to building true centres of excellence, it is favoured with a growing corps of very talented investigators who have great potential.

The Board was very gratified by both the volume and quality of the response to the initial competition: 18 groups with proposals totalling approximately $25 million over five years. The Board had committed $200,000 annually to the program for the five fiscal years beginning in 1986-87, or a total of $1 million from current and future budgets.

We will observe with great interest the progress of the two groups funded to date, in the fields of reproductive biology and pharmacoepidemiology. The reproductive biology grant took effect in January 1988. Already there has been successful recruitment of new scientists and the attraction of significant new external funding. In future Annual Reports we will update the status of groups receiving Strategic and Matching Grants as we view their development as essential to the future of health research in the province.

Having undertaken successfully these two initiatives, the Board is more optimistic than ever about the potential for first rate health research in Saskatchewan. We have developed an array of programs and special activities tailored to suit the unique local circumstances. However, appropriate structures and careful planning and consultation are in themselves insufficient: the SHRB and the research community need a great deal more provincial funding if the province is to maintain a viable health research presence, let alone compete nationally and internationally. Across Canada, the clear winners in health research are those provinces whose governments have invested substantial sums in its development: Ontario, Quebec, and particularly Alberta. Other

provinces--Nova Scotia, Manitoba, British Columbia--have maintained and somewhat expanded their activities because they have benefitted from longer research traditions. Saskatchewan and Newfoundland bring up the rear, and have little prospect of competing successfully for funding of centres of excellence without substantial new investment in research infrastructures.

The Board believes that its focus on postdoctoral fellows, new independent investigators, and strategic grants has made the best possible use of our resources. Both the substantive and economic benefits of enhanced research activity have been clearly recognized. Canada remains a scientifically poor country in key respects; we have 90 scientists per 100,000 population, compared to 280 in the U.S., 150 in West Germany and England. We fall between Yugoslavia and Iceland. Within a nation which spends an alarmingly low percentage of its GNP on science, Saskatchewan is a comparatively impoverished province. Societies without the foresight to invest in research and development are destined for economic decline.

Every significant advance in health care originates from research. Because Saskatchewan is in at least some respects geographically and demographically unique, we cannot simply assume that we can import knowledge and technology produced elsewhere. The SHRB has the capacity and structures to catapult the province into a more competitive position, which can only have a beneficial effect on health science education, and health practice. With a relatively small investment, the province can look forward to excellent returns.

Dr. Bev Robertson
Chairman

2. LEGISLATIVE AUTHORITY AND MANDATE

The SHRB was established as a corporate body under The Health Research Act, proclaimed September 15, 1979, to administer the Saskatchewan Health Research Fund. The Board was empowered under the Act to "assist and stimulate research in the healing arts and health sciences including:

" - the causes, detection, distribution, prevention and management of human illness and disabling conditions;

" - health maintenance and health promotion;

" - the social, environmental, and biological aspects of the human aging process;

" - the utilization of health services."

The Board is to consist of at least six and not more than twelve members appointed by the Lieutenant Governor in Council who are residents of Saskatchewan as follows: two representatives from the health sciences or healing arts in the University of Saskatchewan; one from the University of Regina; one member from the Saskatchewan Department of Advanced Education and Manpower (now Department of Education); one member from the Saskatchewan Department of Health; and up to seven others. Both the Chairman and Vice-Chairman are designated by the Lieutenant Governor in Council. Appendix 1 lists the members who served on the Board during 1987-88.

3. THE SASKATCHEWAN HEALTH RESEARCH FUND

With the proclamation of the Act, the Saskatchewan Health Research Fund came into being for the purpose of assisting and stimulating research in the healing arts and health sciences. Through 1983-84 the Board was required to accumulate a capital fund of unspent reserves which at its maximum level reached $1,560,000. Since then the Board has been authorized to spend down the capital fund; the general operating grant for 1984-85 was zero, for 1985-86 was $400,000, for 1986-87 was $500,000, and for 1987-88 was again $500,000. (A special grant of $100,000 was also received during 1985-86 to hold a Gerontology Research Competition.) Attached as Appendix 2 are the financial statements which detail the financial transactions of the Board as certified by the Provincial Auditor.

The Board's granting level has remained relatively constant over the last few years, as indicated in Figure 1. The Board believes it has been successful in having a positive impact on health research in the province, despite the funding limitations of difficult economic circumstances.

4. COMPETITIONS AND AWARD CATEGORIES

The Board awards grants on the basis of an annual general competition, occasionally augmented by special competitions when funding is available. The

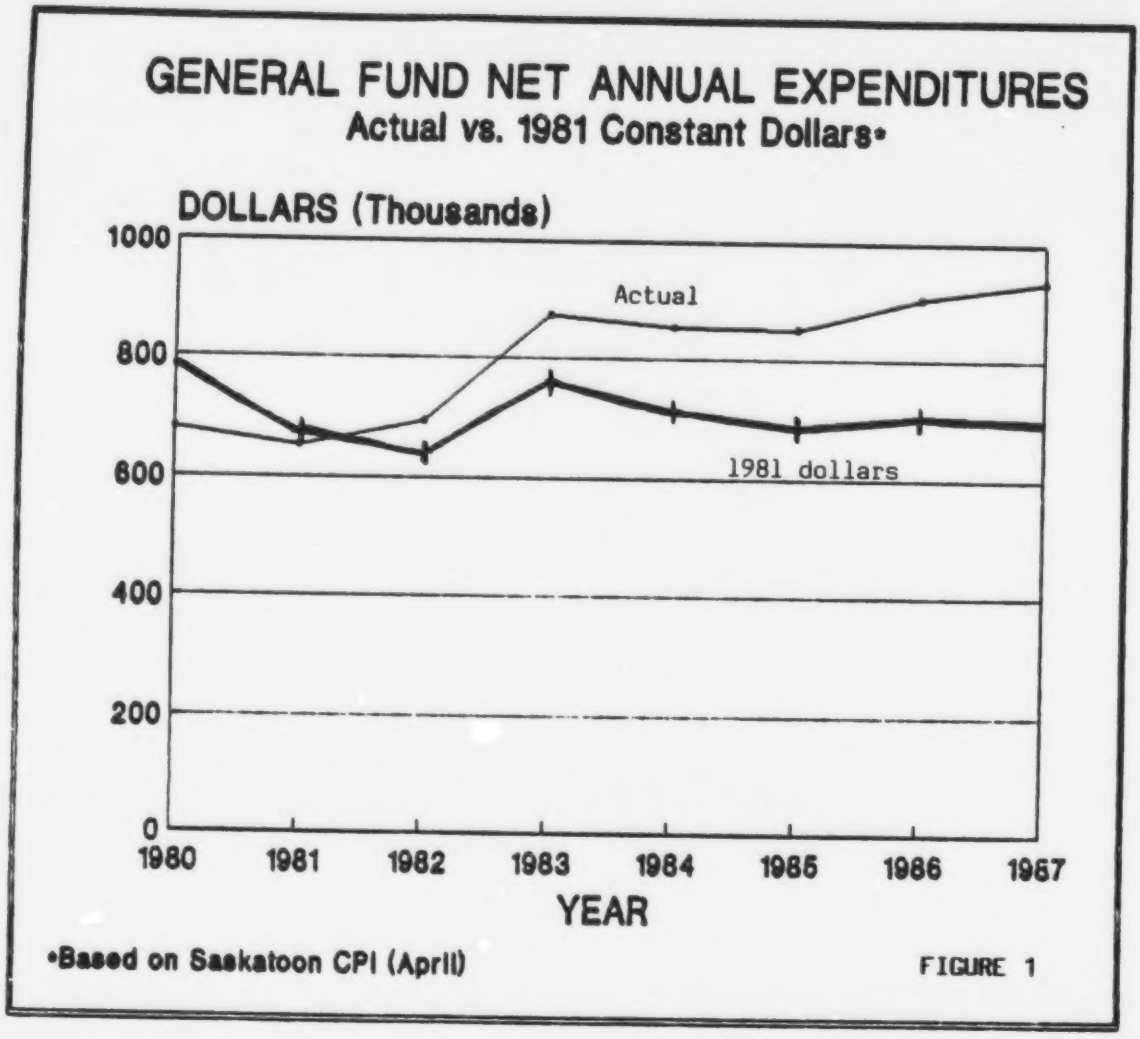

FIGURE 1

NOTES

1) Each year denotes the beginning of a fiscal year; hence 1980, for example, refers to the 1980-81 fiscal year, etc.

2) The expenditures exclude Radiation Fund and Gerontology Fund figures, but include $200,000 (actual dollars) set aside for the Strategic and Matching Grants program in each of fiscal years 1986-87 and 1987-88. The financial statements for these two years do not list these amounts as actual expenditures because commitments to specific projects were not actually made. However, they are included in the graph to indicate that the Board considered the money firmly committed to as yet unspecified purposes.

3) The figures exclude administrative overhead. They have declined by approximately 30% in real terms since 1981-82.

eighth competition, with a closing date of March 15, 1987, invited applications in the following categories:

a) Establishment Grants to assist new researchers in becoming established in the province, to a maximum of $30,000 per annum for up to two years, non-renewable.

b) Research Fellowships in two categories: *Postdoctoral Fellowships*, for holders of a doctorate degree who wish to develop their fields of research and equip themselves for independent investigation in institutions in Saskatchewan, are valued at $22,200 in the first year and $23,700 in the second year, renewable in some circumstances for a third year upon reapplication with a value of 25,200. *Clinical Research Fellowships* are a new category, supporting holders of health professional degrees who wish to pursue careers as clinician researchers (i.e., those who remain in practice and conduct research as well). The stipend in this category varies with experience, and as for Postdoctoral Fellowships is commensurate with rates set by the Medical Research Council of Canada.

c) Socio-Health Research Grants of up to $30,000 per year for up to two years, non-renewable, open to all socio-health researchers in Saskatchewan.

d) Equipment Grants of up to $30,000 to provide new or essential replacement items for proven investigators with active research programs and operating grants.

5. COMPETITION AND REVIEW PROCESS

The Board uses peer review as the major basis for the granting of awards. Appendices 3A, 3B, and 3C list the membership of the Biomedical, Socio-Health, and Personnel Awards Review Committees respectively during 1987-88. Each committee is chaired by a member of the Board, but all other members are drawn from the research community.

The review committees examine, adjudicate, and rank the applications received, and make recommendations to the Board on the order of funding priorities. Research grant applications are sent to two out-of-province experts for assessment. Personnel awards applications are assessed by the committees only. The Board receives the reports of the review committees and retains final authority to make all appropriations after considering the recommendations of its review committees.

6. PROFILE OF THE EIGHTH GENERAL COMPETITION (1987-88)

Table 1 summarizes the total number of applications, the numbers recommended for funding by the review committees, and the ultimate funding decisions of the Board.

TABLE 1

SUMMARY OF ELIGIBLE APPLICATIONS
RECEIVED, RECOMMENDED, AND FUNDED
COMPETITION 8 (1987-88)

	APPL. RECEIVED		APPL. RECOMMENDED		APPL. FUNDED	
GRANT CATEGORY	No.	$ Requested	No.	$ Requested	No.	$ Awarded
Biomed. Establ.	15	895,935	14	626,625	9	441,000
Biomed. Equip	13	338,421	13	338,421	2	38,620
BIOMED. SUBTOTALS	**28**	**$ 1,234,356**	**27**	**$ 965,046**	**11**	**$ 479,620**
Socio-Health Establ.	4	$ 116,407	2	$ 51,000	2	$ 51,000
Socio-Health Research	5	134,254	3	72,500	1	31,500
SOCIO-HEALTH SUBTOT.	**9**	**250,661**	**5**	**123,500**	**3**	**$ 82,500**
Research Fell.	13	524,000	8	305,100	6	$ 234,000
Conference Grants	3	$ 11,296	2	$ 2,650	2	$ 2,650
GRAND TOTALS	**53**	**$ 2,020,313**	**42**	**$ 1,396,296**	**22**	**$ 798,770**

The number of applications was up 28%, and the amount requested was up nearly 35% compared to 1986-87. In no way is the amount requested a reflection of the actual demand and need for health research funding in the province (see Section 7 below for an indication of possible demand). The Board severely restricts eligibility on competitions in order to keep demand for and supply of funding in reasonable balance. Furthermore, the *maximum* SHRB Research Grant is $30,000 in any given year, for a maximum of two years. The *average* Medical Research Council of Canada Grant-In-Aid was $58,300 per year in 1987-88.

The grants and awards from the 1987 competition are listed in Appendix 4.

7. STRATEGIC AND MATCHING GRANTS COMPETITION

As reported in the 1986-87 Annual Report, the Board embarked on a Strategic and Matching Grants program in order to encourage investigators to collaborate in joint multidisciplinary ventures, with the long range view of establishing centres of excellence in particular fields. Given the Board's limited resources it cannot establish centres of excellence by itself. The main purpose of the program is to provide sufficient resources over an initial period of time to allow groups of investigators to develop more fully than would be the case if they continued to work in relative isolation. As has been demonstrated elsewhere, initial research dollars strategically invested generate considerable external funding from granting agencies, foundations, etc. Eventually, the initial funding provided by the SHRB over a three-to-five-year period is expected to increase the capacity and performance of research groups to the point where they can compete for large scale funding from national agencies. In the first competition the Board received 18 proposals requesting nearly $25 million in funding over a five-year period. This demonstrates the willingness and ability of the Saskatchewan health research community to think and plan on a larger scale. Ultimately the Board interviewed nine groups, and invited detailed written scientific proposals from three of these.

In October 1987 the Board enlisted two out-of-province experts to conduct site visits and assessments on each of the three finalists. In January 1988 the Board made its first award.

The Reproductive Biology Research Unit

The initial award is a $500,000 grant over a five-year period to Dr. Bruce Murphy, Head, Reproductive Biology Research Unit, and his colleagues in the Department of Obstetrics and Gynecology, College of Medicine. The development of the RBRU is an example of how a collaborative effort can lead to achievements beyond the sum of the capabilities of individual investigators. Dr. Murphy had established a firm reputation as a reproductive physiologist using animal models. His wish to extend his work into human reproductive science coincided with the desire of the Department of Obststrics and Gynecology to upgrade its research activities. Negotiations led to Dr. Murphy's reestablishing his program in the Department of Obstetrics and Gynecology, and collaboration with his clinical colleagues resulted in the successful SHRB proposal. The external site visitors from Edmonton and London, Ontario noted the perhaps unprecedented degree of collaboration between basic and clinical scientists, and the SHRB funding has allowed Dr. Murphy to hire two new researchers. As will be reported in the 1988-89 SHRB Annual Report, the grant has already allowed the RBRU to attract both first rate scientists, and considerable additional funding. Even sooner than anticipated, the RBRU has demonstrated that the SHRB investment was both strategic in the sense of providing an impetus to a core research program, and matching in the sense of leading directly to the generation of substantial external funding.

On the basis of this initial experience, the Board strongly believes that a greatly expanded Strategic and Matching Grants program would bring great benefits to the province, both scientifically and in terms of external grant generating capacity. It is crucial to recognize that the Board had to commit funds through 1990-91 in the amount of $200,000 per year to make the program possible. The Board believes that if it were able to make three or four such awards annually, extending over a similar five-year period, the province would benefit immeasurably.

The Board made a second $500,000 award to Dr. Carl D'Arcy and his colleagues in the Pharmacoepidemiology Research Consortium. The 1988-89 Annual Report will describe this initiative more fully.

8. CONNECTIONS '88 GERONTOLOGY RESEARCH SYMPOSIUM

CONNECTIONS '88 stands out as perhaps the single most successful event the Board has undertaken to date. From February 8 to 10, 1988, Saskatoon was host to 520 researchers, administrators, health care practitioners, and consumers of services. There were nearly 100 presentations in plenary and simultaneous sessions. There were registrants from all provinces and territories of Canada, and three foreign countries.

CONNECTIONS '88 was among other things uniquely designed to address the needs, concerns, and relationships among researchers and policymakers. According to those in attendance, the conference brought together a remarkably wide array of constituencies concerned with aging and health. Unlike purely academic or purely policy-related symposia, CONNECTIONS '88 sought, and apparently provided, common ground.

The result more than vindicated the Board's substantial investment of time and resources in planning and organizing the event. During and after the conference the feedback was unanimously positive. In addition, the invited presentations plus the best of the unsolicited papers will be published in hard cover by Lewis Publishers of Chelsea, Michigan in May or June of 1989. This will ensure that the legacy of the conference will be accessible to those interested in aging and health on four continents.

9. CONSIDERATIONS FOR THE FUTURE

For the Board, a key lesson of CONNECTIONS '88 is that Saskatchewan can successfully organize and host research-oriented events of the highest calibre. Perhaps the best long-term result that could come out of CONNECTIONS '88 would be the decision on the part of others to embark on events of similar scale and importance. Given the experience of both the Strategic and Matching Grants program and CONNECTIONS '88, the Board is convinced that through its activities it has made significant contributions in instilling a sense of greater vision and competitiveness in the Saskatchewan health research community. The SHRB has been successful in achieving significant results with its resources to date, and believes that it could achieve even more with additional resources. The activities of the Board

indicate that there is great poential in the Saskatchewan research community, and the SHRB believes that this potential warrants an even greater investment in this resource.

APPENDIX I
SASKATCHEWAN HEALTH RESEARCH BOARD
APRIL 1, 1987 THROUGH MARCH 31, 1988

ROBERTSON, Dr. Bev (Chairman effective December 17, 1987)
Dept. of Physics and Astronomy
University of Regina
Regina, Saskatchewan

RIDLEY, Dean Una (Vice-Chairman effective December 17, 1987)
College of Nursing
University of Saskatchewan
Saskatoon, Saskatchewan

ALLSEN, Mr. Gordon
Swift Current Union Hospital
Swift Current, Saskatchewan
(effective December 17, 1987)

BALA, Dr. Marvin
Department of Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

BOAN, Dr. John
Department of Economics
University of Regina
Regina, Saskatchewan

DAVIDSON, Ms. Tony
Box 98
Vanscoy, Saskatchewan
(effective December 17, 1987)

HADDOCK, Ms. Shirley
Box 880
Rosetown, Saskatchewan
(effective December 17, 1987)

HICKIE, Dr. Robert
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

HINDMARSH, Dr. Wayne
College of Pharmacy
University of Saskatchewan
Saskatoon, Saskatchewan

HORLICK, Dr. Lou
Department of Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan
(until December 17, 1987 as Vice-Chairman)

JOHNSON, Dr. Dennis
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan
(until December 17, 1987 as Chairman

MATTHEWS, Dr. Peter
Department of Psychiatry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

(continued)

BOARD MEMBERS 1987-88 (continued)

SMITH, Mr. Sid
Department of Health
Government of Saskatchewan
Regina, Saskatchewan
(effective January 20, 1988)

THOMSON, Mr. Darrell
Department of Health
Government of Saskatchewan
Regina, Saskatchewan
(effective December 17, 1987)
(until January 20, 1988)

WOLSTENHOLME, Mr. James
Department of Health
Government of Saskatchewan
Regina, Saskatchewan
(until December 17, 1987)

WRIGHT, Dr. Don
Department of Advanced
Education & Manpower
Government of Saskatchewan
Regina, Saskatchewan

APPENDIX 2

FINANCIAL STATEMENTS

AND

THE AUDITOR'S REPORT THEREON

SASKATCHEWAN HEALTH RESEARCH BOARD

FINANCIAL STATEMENTS

Year Ended March 31, 1988

OFFICE OF THE PROVINCIAL AUDITOR

REGINA, SASKATCHEWAN

AUDITOR'S REPORT

To the Members of the Legislative Assembly
Province of Saskatchewan

I have examined the balance sheet of the Saskatchewan Health Research Board as at March 31, 1988 and the statements of revenue, expenditure and fund balance and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Board as at March 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with the accounting principles disclosed in Note 2 to the financial statements applied on a basis consistent with that of the preceding year.

W. G. Lutz, F.C.A.,
Provincial Auditor.

Regina, Saskatchewan,
October 24, 1988.

Statement 1

SASKATCHEWAN HEALTH RESEARCH BOARD

BALANCE SHEET

As at March 31

	1988			1987
	General Fund	Gerontology Fund	Total	Total
ASSETS				
Cash (cash less outstanding cheques)	$ 11,329	$ 13,144	$ 24,473	$ (25,725)
Accrued interest receivable	2,002	1,045	3,047	19,934
Accounts receivable	81	9,501	9,582	—
Inter-fund receivable (payable)	10,696	(10,696)	—	—
Investments, at cost which approximates market value	1,324,190	104,190	1,428,380	1,477,379
Fixed assets	18,811	—	18,811	17,774
Other assets	1,283	—	1,283	1,153
	$1,368,392	$117,184	$1,485,576	$1,490,515
LIABILITIES				
Liabilities:				
Accounts payable	$ 486	$ 8,603	$ 9,089	$ —
Grants payable	967,414	4,000	971,414	724,694
	967,900	12,603	980,503	724,694
Equity:				
Equity in fixed assets	18,811	—	18,811	17,774
Fund balance (Statement 2)	381,681	104,581	486,262	748,047
	400,492	104,581	505,073	765,821
	$1,368,392	$117,184	$1,485,576	$1,490,515

(See accompanying notes)

Statement 2

SASKATCHEWAN HEALTH RESEARCH BOARD

STATEMENT OF REVENUE, EXPENDITURE AND FUND BALANCE

Year Ended March 31

	1988			1987
	General Fund	Gerontology Fund	Total	Total
Revenue:				
Grant - Department of Health	$500,000	$ —	$500,000	$500,000
Interest	108,983	5,149	114,132	148,873
Donations	—	79,100	79,100	2,650
	608,983	84,249	693,232	651,523
Expenditure:				
Research grants	836,670	—	836,670	686,881
Wages and benefits	65,812	—	65,812	65,517
Administrative and operating expenses	7,995	—	7,995	8,562
Honoraria and expenses of the board and committees	19,983	—	19,983	11,679
Furniture and fixtures	1,036	—	1,036	917
Rent	12,159	—	12,159	11,649
Conference expense (Note 4)	—	11,362	11,362	—
	943,655	11,362	955,017	785,205
Excess of revenue over expenditure (expenditure over revenue)	(334,672)	72,887	(261,785)	(133,682)
Fund balance, beginning of year	716,353	31,694	748,047	881,729
Fund balance, end of year - to Statement 1	$381,681	$104,581	$486,262	$748,047

(See accompanying notes)

Statement 3

SASKATCHEWAN HEALTH RESEARCH BOARD

STATEMENT OF CHANGES IN FINANCIAL POSITION

Year Ended March 31

	1988			1987
	General Fund	Gerontology Fund	Total	Total
Cash provided by (used in):				
Operating Activities:				
Grant receipts	$ 500,000	$ —	$ 500,000	$ 500,000
Interest and other receipts	126,301	175,495	301,796	141,055
Grants paid	(589,950)	—	(589,950)	(584,436)
Other disbursements	(106,628)	(104,018)	(210,646)	(98,331)
Decrease (increase) in inter-fund receivable	(32,081)	32,081	—	—
	(102,358)	103,558	1,200	(41,712)
Investment Activities:				
Proceeds from matured investments	7,671,442	386,377	8,057,819	6,225,334
Purchase of investments	(7,518,254)	(490,567)	(8,008,821)	(6,225,870)
	153,188	(104,190)	48,998	(536)
Increase (decrease) in cash during the year	50,830	(632)	50,198	(42,248)
Cash balance, beginning of year	(39,501)	13,776	(25,725)	16,523
Cash balance, end of year	$ 11,329	$ 13,144	$ 24,473	$ (25,725)

(See accompanying notes)

SASKATCHEWAN HEALTH RESEARCH BOARD

NOTES TO THE FINANCIAL STATEMENTS

March 31, 1988

1. Authority

The Saskatchewan Health Research Board was established under the provisions of The Health Research Act for the purpose of assisting and stimulating research in the healing arts and health sciences. Pursuant to proclamation of the Act, the Board came into being on September 15, 1979. During 1981 the Board was awarded status as a registered charity under The Income Tax Act.

Under The Health Research Act, the Saskatchewan Health Research Fund was also established, through which all transactions of the Board are conducted. This Fund is comprised of two components: The General Fund and The Gerontology Fund. The revenues and expenditures for each component is separately accounted for in the financial statements.

The Gerontology Fund was established in the 1986 fiscal year pursuant to an agreement entered into between the Department of Health and the Saskatchewan Health Research Board under which the Board agreed to administer and allocate monies received from the Department. The agreement also provided that the use of these funds be restricted to gerontology research and costs incurred in administering and allocating the funds.

2. Accounting Policies

(a) Fund Accounting

The Saskatchewan Health Research Board follows fund accounting procedures in which a self-balancing group of accounts is provided for each Fund.

(b) Research Grants

The Saskatchewan Health Research Board holds annual competitions through which funds are awarded to successful applicants for terms of up to two years. The Board follows the policy of recording the grant awards approved and committed during the year as expenditures. At year end, awards which have not been paid to individuals or to institutions administering awards on behalf of researchers but which are still committed for a competition are shown as grants payable on the balance sheet. The balance of funds advanced to administering institutions in excess of the current requirements of researchers is held in trust by those institutions until drawn down by the researchers. In the event of the completion or termination of a project, or non-compliance with the terms of an award, the balance of unexpended funds is treated as a reduction of grant expenditure in the year that this is determined. These funds are then available to be awarded for future research.

(c) Fixed Assets

Fixed asset purchases are charged as an expense against operations in the year of purchase and are therefore not depreciated. All fixed asset additions charged to expense are reflected in the statement of revenue, expenditure and fund balance. To reflect accountability for fixed assets in the financial statements, it is necessary to record them as balance sheet assets with a corresponding entry to "Equity in Fixed Assets". On disposition, the original cost of fixed assets is removed from the fixed assets and equity in fixed assets accounts and proceeds are recorded as other revenue.

(d) Investments

Investments are recorded at cost.

(e) Donations

Donations are recorded as revenue when cash is received or their receipt is reasonably certain.

3. Cash and Investments

In accordance with a request of the Department of Health, the Board agreed to retain portions of Provincial grants provided in previous years to the General Fund as invested capital. During 1984/85, the Department authorized the Board to begin drawing down on these accumulated funds to support current expenditures for research and administration. Accordingly, the Board considers that, of the cash and investments balance at March 31, 1988, $135,180 was being retained as invested capital of the General Fund (March 31, 1987 - $469,852).

4. Conference Expense

Honoraria, travel and sustenance of guest speakers	$ 66,105
Rental	16,004
Wages	5,341
Printing and postage	25,171
	112,621
Less: Registration fees and other recoveries	101,259
Net Expenses	$ 11,362

5. Commitments

As at March 31, 1988, the Board was committed to a lease agreement for office premises with payments of $1,008 per month to July 31, 1990.

The Board has committed $500,000 to the Reproductive Biology Research Unit, the Department of Obstetrics & Gynocology of the College of Medicine at the University of Saskatchewan.

The grant is to be paid out over a five year period starting January 7, 1988. During the year ended March 31, 1988, $100,000 was awarded. The balance is contingent upon the appropriation of funds to the Board by the Saskatchewan legislature in each of the fiscal years 1988-89 through 1992-93. Future awards are also subject to positive evaluation of the research program by the Board.

APPENDIX 3A

SASKATCHEWAN HEALTH RESEARCH BOARD
BIOMEDICAL REVIEW COMMITTEE
COMPETITION 8 (1987)

HICKIE, Dr. Robert (Chairman) (2)
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

ALBRITTON, William (3)
Department of Microbiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

CARD, Dr. Robert (2)
Department of Medicine
University Hospital
Saskatoon, Saskatchewan

FLOOD, Dr. Peter (2)
Dept. of Veterinary Anatomy
Western College of Vet. Med.
University of Saskatchewan
Saskatoon, Saskatchewan

KELLN, Dr. Rod (3)
Department of Chemistry
University of Regina
Regina, Saskatchewan

KOMIYAMA, Dr. Kunio (2)
Department of Oral Biology
College of Dentistry
University of Saskatchewan
Saskatoon, Saskatchewan

McKAY, Dr. Gordon (1)
College of Pharmacy
University of Saskatchewan
Saskatoon, Saskatchewan

MISRA, Dr. Vikram (3)
Dept. of Vet. Microbiology
Western College of Vet Med.
University of Saskatchewan
Saskatoon, Saskatchewan

MUNOZ, Dr. David (1)
Department of Pathology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

RICHARDSON, Dr. Steven (2)
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

WARRINGTON, Dr. Robert (1)
Department of Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

WOLLIN, Dr. Armin (1)
Department of Physiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

Figure in parentheses indicates consecutive number of years served, including the current competition.

APPENDIX 3B

SASKATCHEWAN HEALTH RESEARCH BOARD
SOCIO-HEALTH REVIEW COMMITTEE
COMPETITION 8 (1987)

BOAN, Dr. John (Chairman) (2)
Department of Economics
University of Regina
Regina, Saskatchewan

DASTMALCHIAN, Dr. Ali (1)
Dept. of Industrial Relations
College of Commerce
University of Saskatchewan
Saskatoon, Saskatchewan

DICKINSON, Dr. Harley (1)
Department of Sociology
University of Saskatchewan
Saskatoon, Saskatchewan

GRANT, Dr. Peter (3)
Department of Psychology
University of Saskatchewan
Saskatoon, Saskatchewann

HEMINGWAY, Dr. Peter (2)
Dept. of Educational Psychology
Faculty of Education
University of Regina
Regina, Saskatchewan

KEEGAN, Dr. David (3)
Department of Psychiatry
University Hospital
Saskatoon, Saskatchewan

KNOWLES BRIAN, Ms. Jan (3)
Box 38
Grand Coulee, Saskatchewan

LAING, Dr. Gail (1)
College of Nursing
University of Saskatchewan
Saskatoon, Saskatchewan

SMITH, Ms. Pamela (1)
Sample Survey & Data Bank Unit
University of Regina
Regina, Saskatchewan

STARK-ADAMEC, Dr. Cannie (1)
Department of Psychology
University of Regina
Regina, Saskatchewan

TAN, Dr. Leonard (3)
Dept. of Community Health and Epidemiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

Figure in parentheses indicates consecutive number of years served, including the current competition.

APPENDIX 3C

SASKATCHEWAN HEALTH RESEARCH BOARD
PERSONNEL AWARDS REVIEW COMMITTEE
COMPETITION 8 (1987)

ROBERTSON, Dr. Bev (Chairman) (2)
Dept. of Physics & Astronomy
University of Regina
Regina, Saskatchewan

BERTRAND, Dr. Helmut (2)
Department of Biology
University of Regina
Regina, Saskatchewan

COCKCROFT, Dr. Donald (1)
Pulmonary Medicine Section
Department of Medicine
University Hospital
Saskatoon, Saskatchewan

DELBAERE, Dr. Louis (3)
Department of Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

EVERED, Dr. Mark (2)
Department of Physiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

HERMAN, Dr. Robert (1)
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

KIRKPATRICK, Dr. D. Lynn (1)
Department of Chemistry
University of Regina
Regina, Saskatchewan

MANNS, Dr. Jack (1)
College of Graduate Studies
and Research
University of Saskatchewan
Saskatoon, Saskatchewan

TERNOWETZKY, Dr. Gordon (1)
Social Administration
Research Unit
Faculty of Social Work
University of Regina
Regina, Saskatchewan

WALLACE, Dr. Sylvia (2)
College of Pharmacy
University of Saskatchewan
Saskatoon, Saskatchewan

Figure in parentheses indicates consecutive number of years served, including the current competition.

APPENDIX 4

SASKATCHEWAN HEALTH RESEARCH BOARD
AWARDS GRANTED
COMPETITION 8 (1987)

RESEARCH FELLOWSHIPS

CHAUDHARY, Ajai K. (Prasad, K.) Physiology, University of Saskatchewan Involvement of oxygen free radicals in ischemic and reperfusion cardiac injury during open heart surgery	$22,200 23,700	87-88 88-89
FLETCHER, Paul J. (Boulton, A.) Psychiatry, University of Saskatchewan Role of trace amines in the central nervous system	25,200	87-88
PATERSON, Ian A. (Boulton, A.) Psychiatry, University of Saskatchewan Studies on trace amines	22,200 23,700	87-88 88-89
RAO, K. V. Subba (Richardson, J. S.) Pharmacology, University of Saskatchewan Mechanism of brain tissue in senile dementia Alzheimer's type	22,200 23,700	87-88 88-89
SLOLEY, Brian D. (Boulton, A.) Psychiatry, University of Saskatchewan Evaluation of sulphation as a biochemical marker in depressive illness and its involvement in amine and drug metabolism	25,200	87-88
WEI, Yunyi (Robertson, B.) Physics and Astronomy, University of Regina Development of nucleoside analogs as anti-viral agents; Development of methodologies for the elucidation of the detailed charge density of small molecules (not including macromolecules) which have the potential for giving new insights into enzyme-substrate interactions and specificity	22,200 23,700	87-88 88-89

BIOMEDICAL ESTABLISHMENT GRANTS

BRETSCHER, Peter A. Microbiology, University of Saskatchewan Beneficial modulation of the immune response in murine leishmaniasis	30,000 27,000	87-88 88-89

CRONE, Lesley-Ann	15,000	87-88
Anaesthesia, University of Saskatchewan	15,000	88-89
Recurrent herpes simplex virus labialis (HSVL) and the use of epidural morphine in obstetric patients		
KADABA, Rajkumar	30,000	87-88
Obstetrics & Gynecology, University of Saskatchewan	27,000	88-89
Endometriosis in human and animal models		
KALRA, Jawahar	30,000	87-88
Pathology, University of Saskatchewan	27,000	88-89
Biochemical changes in cardiac failure due to chronic mitral insufficiency		
LAFERTE, Suzanne	30,000	87-88
Biochemistry, University of Saskatchewan	30,000	88-89
The role of ß1-6 branched Asn-linked oligosaccharides on gp130 in cell proliferation and malignant transformation		
MacINTOSH, Brian R.	30,000	87-88
Physiology, University of Saskatchewan		
Cardiac contractile response with altered calcium availability		
McRAE, Ann C.	30,000	87-88
Physiology, University of Saskatchewan	30,000	88-89
Mouse blastocyst cell surface and cytoskeleton during implantation and delayed implantation		
RENNIE, Robert P.	30,000	87-88
Microbiology, University of Saskatchewan	30,000	88-89
Characterization and assay of cytoplasmic antigens in invasive candidiasis		
THOMAS, Elizabeth	30,000	87-88
Regina General Hospital		
Comparison of antimicrobial creams in the prevention of burn wound sepsis		

<u>SOCIO-HEALTH ESTABLISHMENT GRANTS</u>

FOWLER-KERRY, Susan E.	9,000	87-88
Nursing, University of Saskatchewan		
Adolescent leukemia survivors recollections of past painful procedures		
GREER, Marianne L.	25,000	87-88
Pharmacy, University of Saskatchewan	17,000	88-89
Therapeutic drug equivalence: The development of a decision model		

SOCIO-HEALTH RESEARCH GRANTS

KINASH, Rose G. Nursing, University of Saskatchewan Inflammatory bowel disease: Impact on daily living and coping methods	15,750 15,750	87-88 88-89

EQUIPMENT GRANTS

WALZ, Wolfgang Physiology, University of Saskatchewan Spectrophotometer for protein determination and metabolic assays	8,620	87-88
KHANDELWAL, Ramji Biochemistry, University of Saskatchewan Sorvall RC-5C refrigerated superspeed centrifuge; 2 angle rotors	30,000	87-88

CONFERENCE GRANTS

Canadian Association for Medical Anthropology Conference, May 1988	2,400	87-88
Saskatchewan Conference on Research in Physical Therapy, May 1988	250	87-88